

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
13 December 2001 (13.12.2001)

PCT

(10) International Publication Number
WO 01/95618 A1

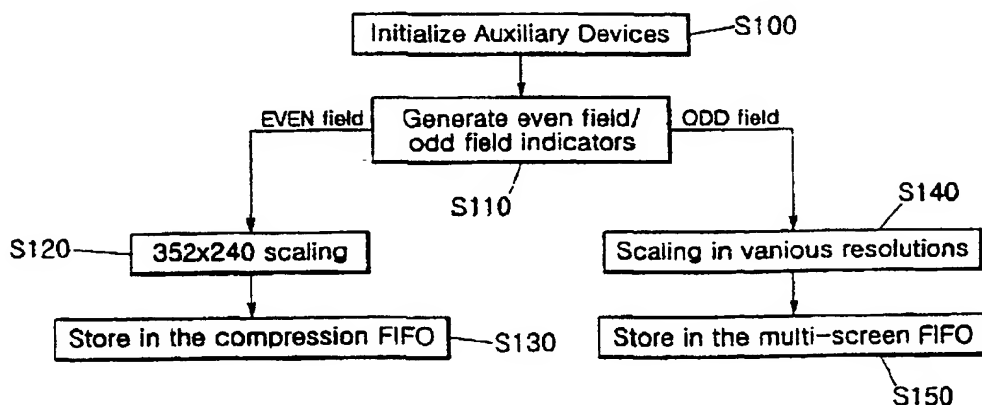
- (51) International Patent Classification⁷: H04N 5/45, 5/91 (74) Agent: KIM, Sun-young; 10th Floor, Korea Coal Center, 80-6, Susong-Dong, Chongro-Ku, Seoul 110-727 (KR).
- (21) International Application Number: PCT/KR01/00246 (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (22) International Filing Date: 19 February 2001 (19.02.2001)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 2000-31825 9 June 2000 (09.06.2000) KR (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
- (71) Applicant (for all designated States except US): POSDATA COMPANY LTD. [KR/KR], 276-2, Seohyun-dong, Pundang-gu, Kyonggi-do, Seongnam-si 463-050 (KR).
- (72) Inventor; and (75) Inventor/Applicant (for US only): JEONG, Cha-Gyun [KR/KR], 248-2006, Ssangyong-Apartment, Hwangol-village, Youngtong-dong, Paldal-gu, Kyonggi-do, Soowon-si 442-741 (KR).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette

(54) Title: METHODS AND DEVICES FOR DIGITAL VIDEO SIGNAL COMPRESSION AND MULTI-SCREEN PROCESS BY MULTI-THREAD SCALING



(57) Abstract: The present invention relates to methods and devices for compression and multi-screen process of digital video signals by multi-thread scaling. The method comprises. (a) a step to scale the resolutions of digital video signals; and (b) a step to compress or process for multi-screens the scaled digital video signals. The device comprises: multi-channel analog/digital converters, a compression FIFO; a multi-screen FIFO; a CPU which initializes each channel's analog/digital converter; and a video processor which transmits to the video memory. The processor for compression/multi-screen process may conduct the compression and multi-screen process sequentially from the compression FIFO and the multi-screen FIFO depending on the even/odd fields of the signals. Thus, the method and device uses N analog/digital converters for the same N channels while providing the same function as the conventional system.

WO 01/95618 A1